

REMARKS

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date 12 - 4 - 02

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MARKED UP VERSION ATTACHED TO AMENDMENT IN

SERIAL NO. 10/051,804

Marked up version of the paragraph starting at page 1, lines 12-19 is below:

The present invention relates to transcription factors with a DNA binding domain comprising at least a basic domain and an adjacent leucine-zipper domain with the following amino acids:
 L e1 x g1 x x x L e2 x g2 x x x' x L e3 x g3 x x x L e4 x g4 x
 x x L e5 (SEQ ID NO: 1)
 wherein L is leucine, gi and ei are possible substitution locations and x are any amino acids and x' is tyrosine or glycine.

Marked up version of the Table on page 14 is below:

Table:

| | <i>e1 g1</i> | <i>e2 g2</i> | <i>e3 g3</i> | <i>e4</i> | <i>g4 e5</i> |
|---------|--|--------------|--------------|-----------|----------------------|
| cJun wt | <u>LEEKVKT</u> <u>KA Q NYE</u> <u>LASTANM</u> <u>LR</u> <u>EQVAQL</u> <u>KQ</u> (SEQ ID NO: 2) | | | | |
| | <i>e1 g1</i> | <i>e2 g2</i> | <i>e3 g3</i> | <i>e4</i> | <i>g4 e5</i> |
| cJun wt | E K | K Q | A T | R Q | K (SEQ ID NO: 2) |
| m0 | K K | K Q | A T | R Q | K (SEQ ID NO: 3) |
| m35 | E E | E Q | A T | R Q | K (SEQ ID NO: 4) |
| m2 | E K | K Q | A T | E E | K (SEQ ID NO: 5) |
| m1 | E E | E Q | A T | E E | K [] (SEQ ID NO: 6) |
| m0,3 | K K | E Q | A T | R Q | K (SEQ ID NO: 7) |
| m0,35 | K E | E Q | A T | R Q | K (SEQ ID NO: 8) |
| m0,2 | K K | K Q | A T | E E | K (SEQ ID NO: 9) |
| m0,1 | K E | E Q | A T | E E | K (SEQ ID NO: 10) |
| m5 | E K | K Q | A T | R Q | E (SEQ ID NO: 11) |
| m0,5 | K K | K Q | A T | R Q | E (SEQ ID NO: 12) |
| m3,5 | E K | E Q | A T | R Q | E (SEQ ID NO: 13) |
| m35,5 | E E | E Q | A T | R Q | E (SEQ ID NO: 14) |

| | | | | | | |
|------|-----|-----|-----|-----|---|-----------------|
| m2,5 | E K | K Q | A T | E E | E | (SEQ ID NO: 15) |
| m1,5 | E E | E Q | A T | E E | E | (SEQ ID NO: 16) |

| | | | | | | |
|---------|--|--------------|-------------------------------------|------------------------|-----------|--|
| ATF2 wt | <i>e1 g1</i> | <i>e2 g2</i> | <i>3 g3</i> | <i>e4 g4</i> | <i>e5</i> | |
| | <u>L</u> EKKAE <u>D</u> <u>L</u> SSLN <u>G</u> O <u>L</u> Q <u>S</u> | EVTL | <u>L</u> RNEVAQ <u>L</u> K <u>Q</u> | <u>(SEQ ID NO: 17)</u> | | |

| | | | | | | |
|---------|--------------|--------------|--------------|--------------|-----------|-----------------|
| ATF2 wt | <i>e1 g1</i> | <i>e2 g2</i> | <i>e3 g3</i> | <i>e4 g4</i> | <i>e5</i> | |
| | E K | S L | Q E | R E | K | (SEQ ID NO: 17) |
| m1 | K K | S L | Q E | R E | K | (SEQ ID NO: 18) |
| m2 | E K | S R | Q V | R E | K | (SEQ ID NO: 19) |
| m5 | K K | S R | Q V | R E | K | (SEQ ID NO: 20) |

Marked up version of Claim 1 is below:

1. (amended) A transcription factor with a DNA-binding domain comprising a basic domain and an adjacent Leucine zipper domain with the following amino acids:
 L e1 x g1 x x x L e2 x g2 x x x' x L e3 x g3 x x x L e4 x g4 x x x L e5 (SEQ ID NO: 1)

wherein L is leucine, gi and ei are possible substitution locations, x are any amino acids, and x' is one of tyrosine or glycine and wherein one of the following sets of substituents are at the nine substitution locations ei and gi:

| | | |
|---------------|-----------------|-------------|
| KK KQ AT RQ K | SEQ ID NO: [3] | <u>21</u> |
| EE EQ AT RQ K | SEQ ID NO: [4] | <u>22</u> |
| EK KQ AT EE K | SEQ ID NO: [5] | <u>23</u> |
| EE EQ AT EE K | SEQ ID NO: [6] | <u>24</u> |
| KK EQ AT RQ K | SEQ ID NO: [7] | <u>25</u> |
| KE EQ AT RQ K | SEQ ID NO: [8] | <u>26</u> |
| KK KQ AT EE K | SEQ ID NO: [9] | <u>27</u> |
| KE EQ AT EE K | SEQ ID NO: [10] | <u>28</u> |
| EK KQ AT RQ E | SEQ ID NO: [11] | <u>29</u> |
| KK KQ AT RQ E | SEQ ID NO: [12] | <u>30</u> |
| EK EQ AT RQ E | SEQ ID NO: [13] | <u>31</u> |
| EE EQ AT RQ E | SEQ ID NO: [14] | <u>32</u> |
| EK KQ AT EE E | SEQ ID NO: [15] | <u>33</u> |
| EE EQ AT EE E | SEQ ID NO: [16] | <u>34</u> |
| KK SL QE RE K | SEQ ID NO: [18] | <u>35</u> |
| EK SR QV RE K | SEQ ID NO: [19] | <u>36</u> |
| KK SR QV RE K | SEQ ID NO: [20] | <u>37</u> , |

valine being replaceable by alanine, leucine, methionine, isoleucine, glutamine.